

From: [PETERSON Jenn L](#)
To: [Robert W. Gensemer](#); [Burt Shephard/R10/USEPA/US@EPA](#); [Joe Goulet/R10/USEPA/US@EPA](#)
Cc: [Eric Blischke/R10/USEPA/US@EPA](#); [Brad Hermanson](#)
Subject: RE: Latest draft WOE framework
Date: 12/31/2007 10:20 AM

Thanks Bob. I will try and review, but my availability is limited this week. I will be able to review in detail on the 7th.

-Jennifer

-----Original Message-----

From: Robert W. Gensemer [mailto:rgensemer@parametrix.com]
Sent: Friday, December 28, 2007 10:46 AM
To: PETERSON Jenn L; Shephard.Burt@epa.gov; Goulet.Joe@epamail.epa.gov
Cc: Blischke.Eric@epamail.epa.gov; Brad Hermanson
Subject: Latest draft WOE framework

Jennifer and others: Attached is my latest version of a nearly completed WOE framework for Portland Harbor. Based on our last meeting in Portland and follow-up discussions with Jennifer, I tried to prepare a version that is a compromise between the detailed version we started with, but the less detailed and more qualitative version I heard folks were leaning towards most recently. As with all compromises, it obviously glosses over details I know are realistic and necessary to consider for the risk evaluation itself, but in the context of a qualitative WOE analysis, just not important enough to change rankings all that much. Obviously, this required a lot of judgment calls you may or may not agree with, but one of the big reasons for doing this exercise is transparency, and providing a mechanism for discussing such issues openly. My ultimate goal was to provide a WOE framework that was both easy to apply (ID LOEs with high, medium, or low ranking), yet detailed enough to explain the reasoning behind these ranking decisions. Hope I got somewhere close to that mark.

Things yet to do and other notes:

1. Generally, I would like to carefully QA this to be sure I agree with all the rankings vs. what the key explanations say I should have assigned, and that the text explaining the qualitative WOE scores match up with the numbers. We will need Jennifer and others to have a close look as well.
2. For fish, I only did three sets of rankings: one each for a small scale receptor (sculpin), a medium-scale receptor (bass), and a large-scale receptor (pikeminnow). For each, I did two sets of rankings, one for non-regulated chemicals, and the other for regulated chemicals (metals and PAHs only, of course). As an example of a real detail that made little difference in these rankings, breaking these decisions down further by chemical or chemical class did not seem to make much of a difference at the end. Obviously, things like exposure data quality or effects data quality and quantity will change even at the individual chemical level, but that would require--in my opinion--much too complex of a WOE scheme, and probably not drive significant differences in final rankings for a given LOE.
3. For wildlife, the WOE scheme is perhaps not all that meaningful since there is really only one LOE for each receptor species (except for egg pathways for eagles and osprey).
4. For plants, there only two LOEs (LWG found no TRVs for sediment LOE, and I don't know of any off-hand), and if we believe LWG's analysis, this receptor group may very well screen out.

But lets keep this here as a placeholder. Pretty straightforward--surface water LOE likely is more reliable than TZW to most aquatic plants.

5. I did not do a WOE analysis for amphibians since there is only a single LOE (water).

6. For fish, we may need to ultimately do a separate WOE matrix for each receptor species, since things like benthic vs. pelagic habitat can make a big difference in how one weights water column vs. near bottom water samples, for example.

All for now. I'll continue working next week to QA this version, and be ready to discuss with others once they've had a chance to review. Let me know what you think!

-Bob

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